

Profit calculation

1. Introduction

1.1 Purpose

The purpose of this document is to outline the requirements for developing a solution to evaluate income and costs generated during the main carriage in a logistics company. This system will calculate the profit or loss for each shipment.

1.2 Scope

The system will:

- Get income from customer payments and costs from service provision.
- Include relevant costs and incomes.
- Calculate profit or losses.

1.3 System Description

The system will handle and evaluate incomes and costs associated with shipments, calculate profits or losses.

1.4 System Context

The system will provide:

- Customer payment administration to handle incomes.
- Operational costs administration to handle service costs.

2. Functional Requirements

2.1 Income and Cost Tracking

- **FR1:** The system must handle customer income for each shipment.
- **FR2:** The system must handle all costs related to service provision.

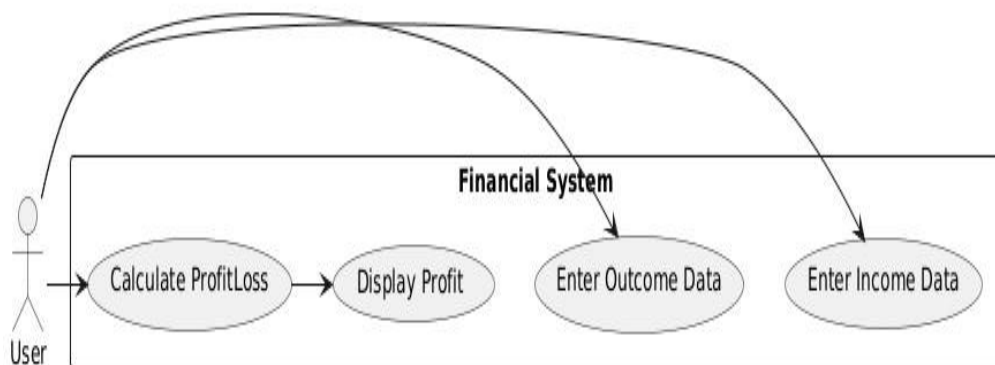
2.2 Profit and Loss Calculation

- **FR3:** The system must calculate the total profit or loss for each shipment.

$$\text{Profit} = \text{Income} - \text{Costs}$$

1.1 Use Case: Calculate Profit

1.1.1 Diagram

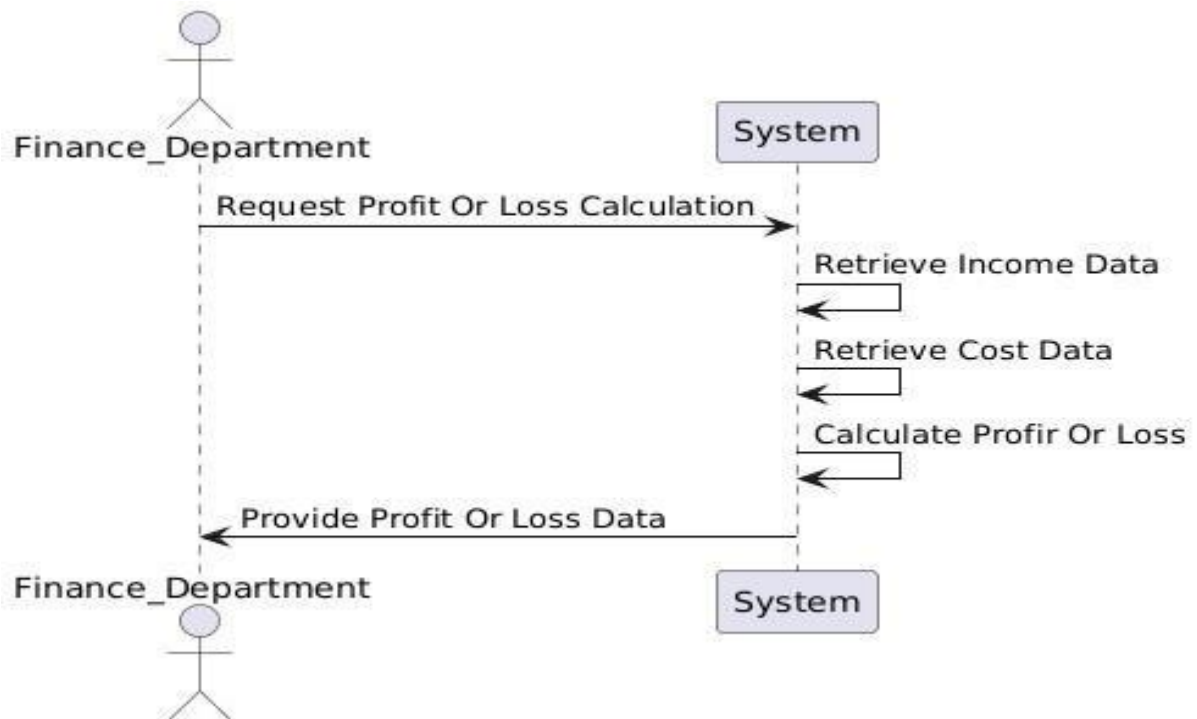


1.1.2 Description

Description:	This use case calculates the total profit or loss for each shipment.
Actors:	
	Finance Department
	System
Pre-conditions:	
	Income and cost data must be recorded in the system.
Postconditions:	
	Total profit or loss is calculated and stored.
Main Flow:	
1.	Finance Department requests profit or loss calculation

	The user initiates a request for the profit or loss calculation.
2.	System retrieves income data (Incomes and Costs)
	The user enters the income data related to the shipment. The system stores the income data.
3.	System retrieves cost data
	The user enters the costs data related to the shipment. The systems store the cost data
4.	System calculates profit or loss
	The System performs the following calculations: • Total Income: customer payment
	• Total Costs: Sum of all recorded costs related to the shipment. • Profit or Loss: Profit or Loss = Income - Total Costs.
5.	System saves the profit or loss data
	The System stores the calculated profit or loss in the database
6.	System displays the calculated information in the user interface
	The system displays the income, total costs and profit or loss in the user interface
Alternative Flows:	
I	Data Retrieval Error
	If there is an error in the process, the system logs the error and notifies in the UI
	The User can retry the request or address the data issue.

1.1.3 Sequence Diagram



1.1.4 UI Prototype

A Web Page

https://dachser.psa.zones

DACHSER
Intelligent Logistics

Calculate Profit

Shipment ID 0001

Income & Outcome

Income

Costs

Cost

Additional Cost

Income	Total Costs	Profit or Loss
1000	200	800
500	900	-400